

Detailed Marking Instructions

These Detailed Marking Instructions provide the basis on which the General Marking Principles should be applied.

| | Skills, knowledge and understanding | Expected Response | Max mark | Additional guidance |
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| 1 | Devise an appropriate aim for an investigation | An appropriate aim is stated | 1 | The aim must describe clearly what is to be investigated. |
| 2 | Be able to describe an application of chemistry and explain its impact on the environment/society | Description of the application. Explanation of the impact on the environment/society. | 2 | 1 mark for providing a statement of characteristics and/or features of the application 1 mark for making clear the relationship between the application and its impact on environment/society |
| 3 | Selecting relevant sources | Explanation of reasons for selection of at least 2 sources. | 2 | 2 marks for an explanation of the choice of sources on the basis of at least 2 of : <ul style="list-style-type: none"> • relevance • reliability of sources • similar/different perspectives For an explanation of the choice of sources on the basis of only one of the above - 1 mark |
| 4 | Selecting relevant Information from sources | Relevant data/information is selected for inclusion in the report. | 2 | 2 marks for inclusion in the report of relevant data/information selected from two or more sources. This could include raw data from an experiment/practical activity, extracted tables, graphs, diagrams and text, or could be processed data/information from two or more sources. For relevant data/information is selected from only one source - 1 mark |
| 5 | Processing and presentation of data/information | Information from at least 2 sources has been processed by summarising, | 6 | 2 marks for processing raw data/information or extracted data/information from at least two sources. |

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| | | <p>performing calculations or re-arranging in appropriate format.</p> <p>The presentation of this processed data/information must use at least 2 different formats, including at least one from graph, table, chart or diagram, and be presented correctly with all appropriate labeling.</p> <p>A comparison of data/information from at least two sources is made.</p> | | <p>Processing can include, for example, performing calculations, plotting graphs from tables, populating tables from other sources, summarising referenced text, etc. It must be clear where the raw or extracted data/information came from.</p> <p>For processing from only one source - 1 mark</p> <p>2 marks for presenting processed data/information in at least 2 different appropriate formats from summary, graph, table, chart or diagram (one must be graph, table, chart or diagram). In each case, sufficient detail should be included to convey the data/information.</p> <p>For presenting in one appropriate format only - 1 mark</p> <p>1 further mark For complete labelling of the graph, table, chart or diagram.</p> <p>1 mark for a comparison of data/information from at least two sources.</p> |
| 6 | Drawing a valid conclusion | A valid conclusion is stated. | 1 | 1 mark for drawing a conclusion that relates to the aim and is supported by evidence from the candidate's research. |
| 7 | Applying knowledge and understanding of chemistry | An explanation of the underlying chemistry as it relates to the topic. | 3 | <p>Maximum of 3 marks for an explanation of the underlying chemistry.</p> <p>The response might include a statement of the principles involved, formulae, chemical equations, calculations, chemical properties related to the bonding present</p> <p>The candidate must use chemistry terms/ideas which are mostly correct and at an depth appropriate to National 5 Chemistry.</p> <p>3 Marks: should be awarded to a candidate who has demonstrated a good understanding of the chemistry involved. (This does not mean the answer has to be what might be termed an "excellent" explanation or a "complete" one.)</p> |

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| | | | | <p>This means that the candidate:</p> <ul style="list-style-type: none"> ◆ shows a comprehension of the chemistry of the situation by providing a logically correct explanation of the chemistry involved ◆ uses chemistry terms/ideas which are mostly at a depth appropriate to National 5 Chemistry and are mostly correct. <p>2 marks: should be awarded to the candidate who has demonstrated a reasonable understanding of the chemistry involved.</p> <p>This means that the candidate:</p> <ul style="list-style-type: none"> ◆ makes some statement(s) which is/are relevant to the situation, showing that the underlying chemistry is understood. ◆ uses chemistry terms/ideas some of which are at a depth appropriate to National 5 Chemistry, most of which are correct. <p>1 mark: should be awarded to the candidate who has demonstrated a limited understanding of the chemistry involved.</p> <p>This means that the candidate:</p> <ul style="list-style-type: none"> ◆ has made some statement(s) which is/are relevant to the situation, showing that at least a little of the underlying chemistry within is understood. For example, some of the chemistry given might be incomplete, wrong or contradictory ◆ uses chemistry terms/ideas which are mostly not at a depth appropriate to National 5 Chemistry or mostly incorrect. |
| 8 | Report Structure | <ul style="list-style-type: none"> ◆ report has an appropriate structure ◆ at least two relevant sources of information/data are recorded appropriately ◆ report is clear and concise | 3 | <p>Maximum of 3 marks for structure of report.</p> <p>One mark for each of:</p> <ul style="list-style-type: none"> ◆ appropriate and informative title, and use of headings where necessary |

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| | | | | <ul style="list-style-type: none">◆ at least two references to the sources used in report should be given in sufficient detail to allow them to be retrieved by a third party. There is no need to follow a formal referencing system. If one of the sources is an experiment/practical activity, then the title, the aim and the raw data should be recorded.◆ report is clear and concise |
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